

**WHAT IS CLAIMED IS:**

1. A surgical instrument comprising:  
a motor assembly;  
a collet assembly connected to the motor assembly and  
including a body portion with a plurality of engaging members;  
a dissection tool including a tool body with a hub positioned  
in an opening formed within the tool body, the hub including a  
plurality of indentions configured to selectively engage with the  
engaging members.
2. The surgical instrument of claim 1 further comprising:  
a housing for encasing the motor and the collet assembly,  
wherein the collet assembly is capable of rotational movement inside  
the housing.
3. The surgical instrument of claim 1 wherein the dissection  
tool is a relatively flat reciprocating saw blade.
4. The surgical instrument of claim 1 wherein the motor is  
electrically powered.
5. The surgical instrument of claim 4 wherein the electric  
motor is used to turn a spindle, which further rotates an eccentric  
flywheel, which further provides an oscillating motion to the collet  
assembly.

6. The surgical instrument of claim 5 wherein the collet assembly includes a drive member for attaching to a shaft connected to the flywheel.

7. The surgical instrument of claim 1 wherein the hub includes a complete, circular aperture for receiving a portion of the collet assembly.

8. The surgical instrument of claim 7 wherein the opening in the tool body is non-circular.

9. The surgical instrument of claim 7 wherein a portion of the tool body extends all the way around the opening.

10. The surgical instrument of claim 1 wherein the collet assembly includes a plunger in contact with a compression device.

11. The surgical instrument of claim 10 wherein the compression device is a coil spring, the coil spring configured for positioning the plunger in a first state to urge the engaging members into corresponding indentions in the hub and for positioning the plunger in a second state whereby the engaging members are readily separable from their corresponding indentions.

12. The surgical instrument of claim 1 wherein the engaging members are balls.

13. The surgical instrument of claim 1 wherein at least one of the indentions includes two sub-indentions and a protrusion therebetween so that when the engaging members are engaged with the indentions, the hub is locked in place and frictionally engaged with the collet assembly.

14. The surgical instrument of claim 1 wherein the tool body and hub are both made of metal and are joined together by weld, epoxy, or mechanical force.

15. The surgical instrument of claim 1 wherein the tool body and hub are a single monolithic structure.

16. A bone saw blade for use with a powered surgical instrument having a collet assembly, the bone saw blade comprising:  
a flat extending member;  
a cutting surface disposed on the flat extending member;  
a hub disposed on the flat extending member, the hub forming a surrounded-opening having a plurality of engagement locations for selectively engaging with corresponding engagement members on the collet assembly.

17. The bone saw blade of claim 16 wherein the surrounded opening is circular in shape.

18. The bone saw blade of claim 16 wherein the engagement locations are indentions for selectively receiving protrusion from the collet assembly.

19. The bone saw blade of claim 16 wherein a portion of the flat extending member extends completely around the opening.

20. The bone saw blade of claim 16 wherein at least one of the engagement locations includes two sub-indentions and a protrusion therebetween so that when one of the engagement members is engaged with the indentions, the hub is locked in place and frictionally engaged with the collet assembly.

21. The bone saw blade of claim 16 wherein the tool body and hub are both made of metal and are joined together by weld, epoxy, or mechanical force.

22. The bone saw blade of claim 16 wherein the tool body and hub are a single monolithic structure.

23. A coupling assembly for use with a motor in a powered surgical instrument and for selectively attaching a dissection tool to the surgical instrument, the coupling assembly comprising:

a translation member connectable to the motor for receiving a first movement force from the motor and translating it to a second movement suitable for driving the dissection tool;

a body portion connected to the translation member;

a plurality of engagement members;

a selectively engageable plunger configured to move into a first position to move the engagement members to engage with the dissection tool to secure the dissection tool to the collet, and a second position to allow the dissection tool to be separated from the collet.

24. The coupling assembly of claim 23 wherein the plunger and engagement members are configured to be positioned inside an opening of the dissection tool.

25. The coupling assembly of claim 23 wherein the engagement members are spherical shaped and are positioned in equal spaces around the plunger.

26. The coupling assembly of claim 23 further comprising:  
a compression device for urging the plunger towards the second position.

27. The coupling assembly of claim 26 further comprising:  
a post engaged with the compression device; and  
a ball bearing assembly to support the second movement for  
driving the dissection tool.

28. The coupling assembly of claim 27 wherein the dissection  
tool is a bone saw.